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S.G.

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
09/213,544	12/17/98	NARDI	J EVE01-P-565-

IM22/0519  
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EXAMINER	
CHANEY, C	
ART UNIT	PAPER NUMBER

1745

6.

DATE MAILED: 05/19/00

**Please find below and/or attached an Office communication concerning this application or proceeding.**

**Commissioner of Patents and Trademarks**

# Office Action Summary

Application No.  
**09/213,544**

Applicant(s)  
**Nardi**

Examiner  
**Carol Chaney**

Group Art Unit  
**1745**



☒ Responsive to communication(s) filed on 3-14-00

☒ This action is **FINAL**.

☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire three month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

## Disposition of Claims

☒ Claim(s) 1-21 is/are pending in the application.

Of the above, claim(s) \_\_\_\_\_ is/are withdrawn from consideration.

☐ Claim(s) \_\_\_\_\_ is/are allowed.

☒ Claim(s) 1-21 is/are rejected.

☐ Claim(s) \_\_\_\_\_ is/are objected to.

☐ Claims \_\_\_\_\_ are subject to restriction or election requirement.

## Application Papers

☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.

☐ The drawing(s) filed on \_\_\_\_\_ is/are objected to by the Examiner.

☐ The proposed drawing correction, filed on \_\_\_\_\_ is ☐ approved ☐ disapproved.

☐ The specification is objected to by the Examiner.

☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. § 119

☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

☐ All ☐ Some\* ☐ None of the CERTIFIED copies of the priority documents have been  
☐ received.

☐ received in Application No. (Series Code/Serial Number) \_\_\_\_\_.

☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\*Certified copies not received: \_\_\_\_\_.

☒ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

## Attachment(s)

☐ Notice of References Cited, PTO-892

☐ Information Disclosure Statement(s), PTO-1449, Paper No(s). \_\_\_\_\_

☐ Interview Summary, PTO-413

☐ Notice of Draftsperson's Patent Drawing Review, PTO-948

☐ Notice of Informal Patent Application, PTO-152

--- SEE OFFICE ACTION ON THE FOLLOWING PAGES ---

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***Claim Rejections - 35 USC § 103***

1. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

2. Claims 1-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mototani et al. (US Patent 5,482,798) for essentially reasons of record.

As discussed in the earlier office action, applicants' invention is essentially directed to alkaline batteries with cathodes containing manganese dioxide and expanded graphite and Mototani et al. disclose alkaline manganese batteries containing manganese dioxide and expanded graphite. (Note column 3, lines 40-52.)

The disclosure of Mototani et al. differs from applicants' claims in that Mototani et al. do not disclose kerosene absorption values, surface areas, or densities of the expanded carbon particles used, and do not disclose the identical expanded graphite particle size ranges and distributions claimed by the applicants.

Mototani et al. disclose forming expanded graphite particles by introducing sulfuric acid into the layers of graphite and rapidly heating the graphite to 800 to 1000°C. (Note Mototani et al., column 3, lines 44-50.)

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***Response to Arguments***

3. Applicant's arguments filed 3-14-2000 have been fully considered but they are not persuasive.

Applicants argue Mototani et al. fail to teach or suggest a kerosene absorption value for expanded carbon in the range claimed by the applicants.

It is noted that both Mototani et al. and the applicants form expanded graphite by introducing sulfuric acid into graphite and then rapidly heating the graphite to about 1000°C. Because the processes for forming expanded graphite disclosed by the applicants and the prior art are similar, the materials produced will be similar, and thus have similar physical properties, including kerosene absorption values. M.P.E.P. §2112.01 states: "Products of identical chemical composition can not have mutually exclusive properties." A chemical composition and its properties are inseparable. Therefore, if the prior art teaches the identical chemical structure, the properties applicant discloses and/or claims are necessarily present. In re Spada, 911 F.2d 705, 709, 15 USPQ2d 1655, 1658 (Fed. Cir. 1990) (Applicant argued that the claimed composition was a pressure sensitive adhesive containing a tacky polymer while the product of the reference was hard and abrasion resistant. "The Board correctly found that the virtual identity of monomers and procedures sufficed to support a prima facie case of unpatentability of Spada's polymer latexes for lack of novelty.").

Applicants further assert average cell performance is significantly enhanced by the use of expanded graphite with kerosene absorption values within the range claimed. Applicants' Figure

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7 is cited in support of this statement. However, it is noted that non-inventive samples S2 (kerosene absorption rate of 2.06) and S8 (kerosene absorption rate of 3.51) have service performance times greater than inventive sample S9.

Applicants assert Mototani et al. do not suggest or mention significance of using graphite with a purity of 99.9 or better. However, it would have been obvious to the skilled artisan to use highly purified materials in an electrical device in order to improve product performance.

### ***Conclusion***

4. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

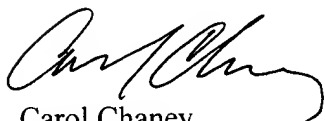
A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

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5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Carol Chaney whose telephone number is (703) 305-3777. The examiner can normally be reached on Monday-Friday from 8:00 am to 4:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ms. Maria Nuzzolillo, can be reached on (703) 305-3776. The fax phone number for the organization where this application or proceeding is assigned is (703) 305-3599.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.



Carol Chaney  
Patent Examiner  
Art Unit 1745  
May 18, 2000